

**FIRE FIGHTING SHIPBOARD TRAINER, DEVICE 19F3A****TRAINING CATEGORY:**

PROPULSION ENGINEERING (Fire Fighting)

ORIGINATING AGENCY:

NAVSEA

SECURITY CLASSIFICATION:

Device 19F3A is unclassified.

PURPOSE:

To provide training in the extinguishment of Class A, B, and C shipboard fires.

INTENDED USE:

To train shipboard fire fighting teams.

FUNCTIONAL DESCRIPTION:

Device 19F3A is an advanced electro-mechanical system that simulates Class A, B, and C shipboard fires by using live, controlled, propane-fueled fires.

The trainer is housed in an independent building at the fire fighting school installation site. It consists of two (2) functionally independent building halves, designated north and south. Each side is controlled by an associated Instructor/Operator Station (IOS).

Fire emergencies are staged in compartments which contain structures called fireplaces. Fireplaces resemble the actual shipboard component that is the potential fire source. Four (4) compartments are contained on each side. The North side contains an additional chamber used to simulate landing deck fire scenarios. This Deck Fireplace is located across a staging area outside the entrance to compartments 1 and 2.

Each compartment provides a sound powered telephone (SPT), fireplace hardware, remote I/O modules for controlling the fireplace, a compartment control panel for the instructor, and sensing devices for propane, air quality, fire effluents and temperature. All operation, except for the SPT communications system, is under the control of a programmable controller (PC).

DIRECTORY OF NAVAL TRAINING DEVICES

The trainer building shown includes a supervisory area and a training area. The supervisory area consists of an electrical equipment room and a control room from which primary control and monitoring of the trainer are exercised. The electrical equipment room contains air quality and fire effluent monitoring system cabinets, and the power distribution panels. The control room contains a programmable controller (PC) system that controls trainer operation. Air conditioning equipment (Government furnished), all radio communication equipment, a printer, an IOS for each trainer side, and a data termination cabinet are also contained in the control room.

Overall control of each training side (North and South) is exercised primarily from the respective IOS. The PC system permits use of the fireplaces either individually or in any combination.

PHYSICAL INFORMATION:

Sizes:	Dimensions (Feet)		
	HT	WT	DEPTH
Trainer Building Dimensions	119	145	73

Total Equipment Weight: 48,300 lbs. (approx.)

Complete dimensional information for all Device 19F3A major assemblies is provided on the installation drawings, which are part of the Engineering Drawings and Associated Lists, Level 2, Document No. 315-L008.

EQUIPMENT REQUIRED (NOT SUPPLIED):

Oxygen Breathing Apparatus (OBA)

POWER REQUIREMENTS:

Input Characteristics:

120/208V, 60 Hz, 3-Phase

Maximum Peak Power

30.8 KVA

Maximum Starting Power:

100 Amps, 3-Phase

PUBLICATIONS FURNISHED:

1. Technical Manual for Basic Fire Fighting Shipboard Trainer, Device 19F3A; Operation and Maintenance, NTSC P-6842 (U).
2. Planned Maintenance System (PMS) for Basic Fire Fighting Shipboard Trainer, Device 19F3A, NTSC P-6843 (U).
3. Technical Manual, Supplementary Data for Commercial Equipment, Device 19F3A, NTSC P-6844-S (U).
4. Instructor's Utilization Handbook for Basic Fire Fighting Shipboard Trainer, Device 19F3A, NTSC P-6845 (U).
5. On-The-Job Training Handbook for Basic Fire Fighting Shipboard Trainer, Device 19F3A, NTSC P-6846 (U).
6. Operators Manual for Basic Fire Fighting Shipboard Trainer, Device 19F3A, NTSC P-6841 (U).

PERSONNEL:

Instructors/Operators: As required by operations

Trainees: Recommended Class Size - 60

Maintenance: PMS Maintenance Cycle - one (1) year

CONTRACT IDENTIFICATION:

Manufactured by Symtron Systems, Inc., Fair Lawn, NJ under NAVTRASYSCEN Contract No. N61339-85-C-0053.

LOCAL STOCK NUMBER:

6910-LL-C00-6946